CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. 00-052

REVISION TO SITE CLEANUP REQUIREMENTS AND RESCISSION OF ORDER NO. 95-178 FOR:

W.S. ASSOCIATES

NESTLE USA - BEVERAGE DIVISION, INC.

AND

D.H. OVERMYER CO., INC.

for the property located at

1964 WILLIAMS STREET SAN LEANDRO ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter Board), finds that:

1. **Site Location**: The 1964 Williams Street Site (hereinafter the Site) is located in the north end of a warehouse complex along Williams Street, near the intersection of Merced Street. A spur of the Southern Pacific railroad passes along the west edge of the warehouse complex and separates the Site from adjacent property at 2040 Williams Street. The west side of the Site is equipped with three rollup doors that allow access to the railroad spur. Asphalt driving and parking areas surround the north and east sides of the Site.

The property that the Site is located on is relatively flat with an average elevation of 30 feet above mean sea level. The property is graded to facilitate drainage of surface water runoff into culverts along the western and eastern edges of the property and ultimately into a storm sewer main that parallels Williams Street. The storm sewer main passes west across Doolittle Drive and discharges into San Francisco Bay about a mile to the west of the site.

- 2. **Site History:** D. H. Overmyer Co., Inc. owned the site from 1966 to January 1968. At this point, the property was sold to D. Devine. D. H. Overmyer Co., Inc. acted as the master lessee of the site from this point until May 1974. In August 1968, a portion of the property was leased to The Austin Company, who had been hired by Hills Brothers Coffee Company (predecessor to Nestle USA Beverage Division, Inc., hereinafter Nestle) to develop a freeze drying system. From 1969 to 1971, a coffee freeze drying facility was operated at the site by Hills Brothers Coffee Company/Nestle. A third company, Cryo-Maid, Inc. (owned by Edward C. Hirschberg), operated a freeze drying facility at the Site from 1972 to 1982. Trichloroethylene (TCE) was used and stored on site during each of these freeze drying operations.
 - W.S. Associates acquired the property in October 1984, and is the current owner of the Site. The freeze drying equipment was dismantled by C. J. Construction & Rigging Co. (owned by John Goldberg) and removed from the Site in 1988. There is evidence that additional releases of TCE may have occurred during these operations. On August 2, 1988, an occupant at one of the warehouses adjacent to the Site reported to the Department of Toxic Substances Control (formerly a division of the Department of Health Services) and the fire department of the City of San Leandro that a liquid spill had occurred during tank dismantling operations on Site. The liquid, reported to have been Freon, was said to have entered the storm sewer system as a result of the spill. The site is currently occupied by Mark Container and used for storage purposes.

During a pre-purchase environmental investigation conducted in 1989, high levels of TCE were detected in soil and groundwater in and around the Site. Information obtained from depositions in litigation initiated by W.S. Associates regarding the Site indicated several potential sources of TCE releases to the environment. W. S. Associates initiated litigation against Nestle and other parties in 1990 in an effort to obtain commitments to address the identified environmental problems. W. S. Associates and Nestles ultimately settled with all but one of the previous owners and operators of the site (D. H. Overmyer Co., Inc.) and agreed to be named as Dischargers. This settlement is reflected in a 1995 District Court Order. The Board adopted Site Cleanup Requirements (SCR) for the site in 1995. A more recent court ruling in 1998 allowed Nestle to pursue D. H. Overmyer Co., Inc. as a potentially responsible party.

3. Named Dischargers: W.S. Associates, being the present property owner, Nestle, being a former tenant that operated a freeze drying facility at the Site, and D. H. Overmyer Co., Inc., being a former owner of the site are named as dischargers. If additional information is submitted indicating that other parties caused or permitted any waste to be discharged on the site where it entered or could have entered waters of the state, the Board will consider adding those parties' names to this order.

- 4. **Regulatory Status**: The Site was subject to Order No. 95-178 (Site Cleanup Requirements), adopted August 23, 1995. The order presented herein represents a revision of required tasks and compliance deadlines in the original order prepared for the site. These revisions are necessary in order to reflect the results of interim remedial measures carried out at the Site since the original order, allow implementation of advanced remedial technology not available at the time the original order was prepared, update tasks required for the Site, and update timelines for compliance with these actions.
- 5. **Site Hydrogeology**: The site is underlain by three to eight feet of clayey and silty fill material. This is underlain by at least 80 feet of interlayered, unconsolidated alluvial fan deposits of clay and silt with discontinuous interlayers of coarser-grained sand and gravel. The top of shallow groundwater is located approximately 18 feet below the ground surface (bgs), with seasonal fluxuations of up to several feet. Groundwater is grouped into three separate zones of fine-grained and coarse-grained units: an "A" zone extending from the top of groundwater to a depth of approximately 34 feet bgs; a "B" zone extending from 34 feet bgs to approximately 42 feet bgs; and a "C" zone extending from the base of the "B" zone to a depth of 81 feet bgs. Groundwater in each of the zones flows to the southwest at a gradient of approximately 0.004 ft/ft. Studies have indicated some hydraulic connection between the different groundwater zones.
- 6. Remedial Investigation: Initial characterization of the vertical and later extent of impacted soil and groundwater is provided in a series of reports, including *Phase II Environmental Site Assessment* (September 15, 1989), *Soil and Groundwater Investigation* (June 4, 1990), *Remedial Investigation Report* (June 2, 1993), *Warehouse Interim Remedial Action Plan, Warehouse Characterization Report* (December 22, 1995), *Remedial Investigation Report and Fourth Quarter Monitoring Report* (June 27, 1997), and subsequent quarterly groundwater monitoring reports.
 - W.S Associates first detected trichloroethylene (TCE) in soil and groundwater at the Site during a pre-sale environmental investigation conducted in 1989. Subsurface investigations at the Site have confirmed the presence of TCE, tetrachloroethylene, 1,1 dichloroethylene, 1,1,1-trichloroethane, acetone, trichlorofluormethane, 1,1,2-trichloroethane and methylene chloride in soil and groundwater beneath the warehouse and extending into areas west of the Site. TCE was the predominant volatile organic chemical present. An extensive area of soil under the warehouse was reported to be impacted with TCE. The highest concentrations of TCE in soil (up to 6,000 mg/kg) were reported for samples collected outside of the warehouse and within 50 feet of the rear rollup doors.

Reported concentrations of TCE in groundwater at the site are substantially higher that the drinking water standard of 5 ug/L. TCE was detected at a concentration of 520,000 ug/L in a groundwater sample collected from the A Zone immediately downgradient of the rear rollup doors (MW-9). This concentration represents approximately 50% of TCE solubility and indicates the possible presence of free product in groundwater. TCE concentrations up to 2,000 ug/L have been reported for groundwater samples collected from the B Zone. The vertical extent of groundwater impacts above drinking water standards in the C Zone has not been fully evaluated. A concentration of 42 ug/L TCE was reported for a groundwater sample collected from the C Zone immediately beneath adjacent to the 1964 Williams St. warehouse (MW-10C) during the December 1999 sampling event. As of the date of this order, the reported impact has not been verified. Prior to this time, TCE had not been reported in the C Zone at concentrations above drinking water standards. TCE has not been detected at concentrations above the drinking water standard in a monitoring well screened in the C Zone downgradient of the warehouse area.

Groundwater data collected in 1999 indicate that the plume extends approximately 2,500 feet to the southwest of the Site to the intersection of Doolittle Drive and Williams Street in both the A Zone and B Zone units. The leading edge of the plume is approximately 2,500 feet from the San Francisco Bay margin. The potential for continued migration of the plume has not been fully evaluated.

7. Interim Remedial Measures: Interim remedial measures for impacted soil were implemented at the Site in order to reduce the short-term threat to water quality, human health and the environment. A soil vapor extraction system was installed and put into operation at the Site in October 1996. Use of the system was discontinued in June 1999, after the mass of TCE and other volatile organic compounds being extracted reached negligible levels. An estimated 3,357 pounds of TCE were removed during operation of the system. An estimate of the total mass of volatile organic compounds in soil at the Site was not reported. The magnitude and extent of remaining soil impacts at the Site has not been fully evaluated.

The use of pump-and-treat systems were recommended by the Discharger's previous consultant for interim use at the Site as a means to order to control plume migration and address high levels of impact in the source area (*Focused Feasibility Study and Interim Remedial Measure Work Plan*, dated August 29, 1997). In a letter dated January 28, 2000, the Regional Water Quality Control Board (RWQCB) concurred with the Discharger's current consultant that the need for and ultimate design of a pump-and-treat system could be most effectively be evaluated following completion of the proposed groundwater remediation pilot test. As a condition for approval of the proposed groundwater remediation pilot test program, the RWQCB requested that a formal discussion of this decision be submitted for review by March 1, 2000. The

Discharger's report entitled Evaluation of the Stability of VOC Impacts to Groundwater and Potential Vertical Conduits (dated February 29, 2000) adequately satisfied this request. The need to implement more aggressive groundwater remedial measures such as pump-and-treat at the site will be addressed in Task 4 of the revised Order (Proposed Final Remedial Actions And Cleanup Standards).

A pilot test for interim remediation of impacted groundwater was carried out at the Site during the latter half of 1997. The test included the injection of toluene into impacted groundwater in an attempt to generate co-metabolic in-situ degradation TCE and other volatile organic compounds present. Results of the pilot test were reportedly inconclusive. A summary report has not been submitted to the Board as of the date of this revised order.

A proposal for a second pilot test for groundwater remediation (Work Plan for Groundwater Remediation Pilot Test, December 7, 1999) was approved by the Board in a letter dated January 28, 2000. This test will include the injection of a carbohydrate solution into groundwater. The intent is again to generate a reducing environment and increase the rate of in-situ biodegradation of the TCE and other volatile organic compounds present. Results of this effort will be used to select and design final remedial measures for the Site as described in this order.

- 8. Adjacent Sites: The site is located within a industrial area of San Leandro. The San Leandro area is know to contain several large plumes of impacted groundwater, of which TCE is one of the predominant pollutants. Previous studies by the dischargers indicate that the TCE plume detected below the Site is not associated with other plumes in the area.
- 9. Basin Plan: The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20, 1995, and November 13, 1995, respectively. A summary of regulatory provisions is contained in 23 CCR 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater.

The potential beneficial uses of groundwater underlying and adjacent to the site include:

- a. Municipal and domestic water supply
- b. Industrial process water supply
- c. Industrial service water supply
- d. Agricultural water supply

e. Freshwater replenishment to surface waters

A deep well formerly used by Kellogg to supply boilers is located at the adjacent property at 2040 Williams Street. The well is screened from 230 to 260 feet and 310 to 450 feet below ground surface. The potential for a hydraulic connection between the shallow, impacted groundwater and deeper aquifers has not been fully evaluated.

10. Other Board Policies: Board Resolution No. 88-160 allows discharges of extracted, treated groundwater from site cleanups to surface waters only if it has been demonstrated that neither reclamation nor discharge to the sanitary sewer is technically and economically feasible.

Board Resolution No. 89-39, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas of high TDS, low yield, or naturally-high contaminant levels.

11. State Water Board Policies: State Water Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," applies to this discharge and requires attainment of background levels of water quality, or the highest level of water quality which is reasonable if background levels of water quality cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of such water, and not result in exceedance of applicable water quality objectives. Given the Board's past experience with groundwater pollution cases of this type, it is unlikely that background levels of water quality can be restored. This initial conclusion will be verified when a cleanup plan is prepared. This order and its requirements are consistent with Resolution No. 68-16.

State Water Board Resolution No. 92-49, "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304," applies to this discharge. This order and its requirements are consistent with the provisions of Resolution No. 92-49, as amended.

- 12. **Preliminary Cleanup Goals**: The dischargers will need to make assumptions about future cleanup standards for soil and groundwater, in order to determine the necessary extent of remedial investigation, interim remedial actions, and the draft cleanup plan. Pending the establishment of site-specific cleanup standards, the following preliminary cleanup goals should be used for these purposes:
 - a. Groundwater: Applicable water quality objectives (e.g. maximum contaminant levels, or MCLs) or, in the absence of a chemical-specific objective, risk-based levels (e.g. drinking water equivalent levels).

b. Soil: 1 mg/kg total volatile organic compounds (VOCs), 10 mg/kg total semi-volatile organic compounds (SVOCs), and background concentrations of metals.

As described in the Basin Plan, development of chemical-specific cleanup goals below the preliminary cleanup goals listed above may be required by the Board if deemed appropriate for the Site.

- 13. **Basis for 13304 Order**: The dischargers are alleged to have caused or permitted waste to be discharged or deposited where it is or probably will be discharged into waters of the State and creates or threatens to create a condition of pollution or nuisance.
- 14. **Cost Recovery**: Pursuant to California Water Code Section 13304, the dischargers are hereby notified that the Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this order.
- 15. CEQA: This action is an order to enforce the laws and regulations administered by the Board. As such, this action is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15321 of the Resources Agency Guidelines.
- 16. **Notification**: The Board has notified the dischargers and all interested agencies and persons of its intent under California Water Code Section 13304 to prescribe site cleanup requirements for the discharge, and has provided them with an opportunity to submit their written comments.
- 17. **Public Hearing**: The Board, at a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the dischargers (or their agents, successors, or assigns) shall cleanup and abate the effects described in the above findings as follows:

A. PROHIBITIONS

1. The discharge of wastes or hazardous substances in a manner which will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.

- 2. Further significant migration of wastes or hazardous substances through subsurface transport to waters of the State is prohibited.
- 3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of wastes or hazardous substances are prohibited.

B. TASKS

1. WORK PLAN FOR COMPLETION OF REMEDIAL INVESTIGATION

COMPLIANCE DATE: September 1, 2000

Submit a work plan acceptable to the Executive Officer to finalize identification of the lateral and vertical extent of chemicals of potential concern in soil and groundwater. The work plan shall summarize the results of the previous investigations and describe additional characterization activities to be carried out both onsite and offsite. Tasks identified in the work plan shall include: (1) characterize the extent and magnitude of remaining impacts in vadose-zone soils; (2) characterize the extent, magnitude and stability of impacts to groundwater; (3) evaluate the potential for vertical migration of impacted groundwater to deeper aquifers.

The work plan should include a discussion of proposed soil sampling locations and the locations of additional monitoring well locations. Additional monitoring wells should be appropriately incorporated into the existing groundwater monitoring program. The potential for vertical migration of impacted groundwater should include a review of the former Kellogg industrial well KW-1 located on the adjacent property at 2040 Williams Street.

2. COMPLETION OF REMEDIAL INVESTIGATION

COMPLIANCE DATE: June 1, 2001

Submit a final technical report acceptable to the Executive Officer documenting completion of necessary tasks identified in Task B.1 work plan. The technical report should define the current and historical vertical and lateral extent of pollution down to concentrations at or below soil and groundwater cleanup standards selected for use at the site and approved by the Board. Additional sampling below the floor of the 1964 Williams Street warehouse building is not required for completion of Task 4 - Proposed Final Remedial Actions And

Cleanup Standards. Monitoring wells proposed in the report Evaluation of the Stability of VOC Impacts to Groundwater and Potential Vertical Conduits (dated February 29, 2000) should be installed and incorporated into the groundwater monitoring program as indicated in that report. Groundwater data in addition to that defined in the monitoring program may need to be collected as needed in order to adequately define the nature of groundwater impacts over time. Submittals for this task may be combined with submittals for Task 4.

3. EVALUATION OF INTERIM REMEDIAL ACTIONS

COMPLIANCE DATE: June 1, 2001

Submit a technical report acceptable to the Executive Officer documenting completion of necessary tasks identified in the reports entitled *Remedial Investigation/Feasibility Study Work Plan* (August 25, 1995), *Warehouse Interim Action Work Plan - Warehouse Feasibility Study* (March 15, 1996), *Focused Feasibility Study and Interim Remedial Measure Work Plan* (August 29, 1997), and *Work Plan for Groundwater Remediation Pilot Test*, December 7, 1999. The report should discuss the nature and results of all interim remedial actions carried out at the site, impacted soil removal, soil vapor extraction and groundwater remediation pilot tests studies. Implementation of the of the interim groundwater extraction (e.g., pump-and-treat) system recommended in the *Focused Feasibility Study* and *Interim Remedial Measure Work Plan* will not be required for completion of this task. Submittals for this task may be combined with submittals for Task 4 described below.

4. PROPOSED FINAL REMEDIAL ACTIONS AND CLEANUP STANDARDS

COMPLIANCE DATE: June 1, 2001

Submit a technical report acceptable to the Executive Officer containing:

- a. Results of the remedial investigation
- b. Evaluation of the installed interim remedial actions
- c. Feasibility study evaluating alternative final remedial actions
- d. Risk assessment for current and post-cleanup exposures
- e. Recommended final remedial actions and cleanup standards
- f. Implementation tasks and time schedule

Item c should include projections of cost, effectiveness, benefits, and impact on public health, welfare, and the environment of each alternative action.

Items a through c should be generally consistent with the guidance provided by Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300), CERCLA guidance documents with respect to remedial investigations and feasibility studies, Health and Safety Code Section 25356.1(c), and State Board Resolution No. 92-49 as amended ("Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304").

Item e should consider the preliminary cleanup goals for soil and groundwater identified in Finding 12 and should address the attainability of background levels of water quality (see Finding 11).

5. **Delayed Compliance**: If the dischargers are delayed, interrupted, or prevented from meeting one or more of the completion dates specified for the above tasks, the dischargers shall promptly notify the Executive Officer and the Board may consider revision to this Order.

C. PROVISIONS

- 1. **No Nuisance**: The storage, handling, treatment, or disposal of polluted soil or groundwater shall not create a nuisance as defined in California Water Code Section 13050(m).
- 2. Good Operation and Maintenance (O&M): The dischargers shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.
- Cost Recovery: The dischargers shall be liable, pursuant to California Water Code Section 13304, to the Board for all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order. If the site addressed by this Order is enrolled in a State Board-managed reimbursement program, reimbursement shall be made pursuant to this Order and according to the procedures established in that program. Any disputes raised by the dischargers over reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures for that program.
- 4. **Access to Site and Records**: In accordance with California Water Code Section 13267(c), the dischargers shall permit the Board or its authorized representative:

- a. Entry upon premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this Order.
- b. Access to copy any records required to be kept under the requirements of this Order.
- c. Inspection of any monitoring or remediation facilities installed in response to this Order.
- d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the dischargers.
- 5. **Self-Monitoring Program**: The dischargers shall comply with the Self-Monitoring Program as attached to this Order and as may be amended by the Executive Officer.
- 6. Contractor / Consultant Qualifications: All technical documents shall be signed by and stamped with the seal of a California registered geologist, a California certified engineering geologist, or a California registered civil engineer.
- 7. **Lab Qualifications**: All samples shall be analyzed by State-certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control (QA/QC) records for Board review. This provision does not apply to analyses that can only reasonably be performed on-site (e.g. temperature).
- 8. **Document Distribution**: Copies of all correspondence, technical reports, and other documents pertaining to compliance with this Order shall be provided to the following agencies:
 - a. City of San Leandro Fire Department

The Executive Officer may modify this distribution list as needed.

9. **Reporting of Changed Owner or Operator**: The dischargers shall file a technical report on any changes in site occupancy or ownership associated with the property described in this Order.

10. **Reporting of Hazardous Substance Release**: If any hazardous substance is discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, the dischargers shall report such discharge to the Regional Board by calling (510) 622-2300 during regular office hours (Monday through Friday, 8:00 to 5:00).

A written report shall be filed with the Board within five working days. The report shall describe: the nature of the hazardous substance, estimated quantity involved, duration of incident, cause of release, estimated size of affected area, nature of effect, corrective actions taken or planned, schedule of corrective actions planned, and persons/agencies notified.

This reporting is in addition to reporting to the Office of Emergency Services required pursuant to the Health and Safety Code.

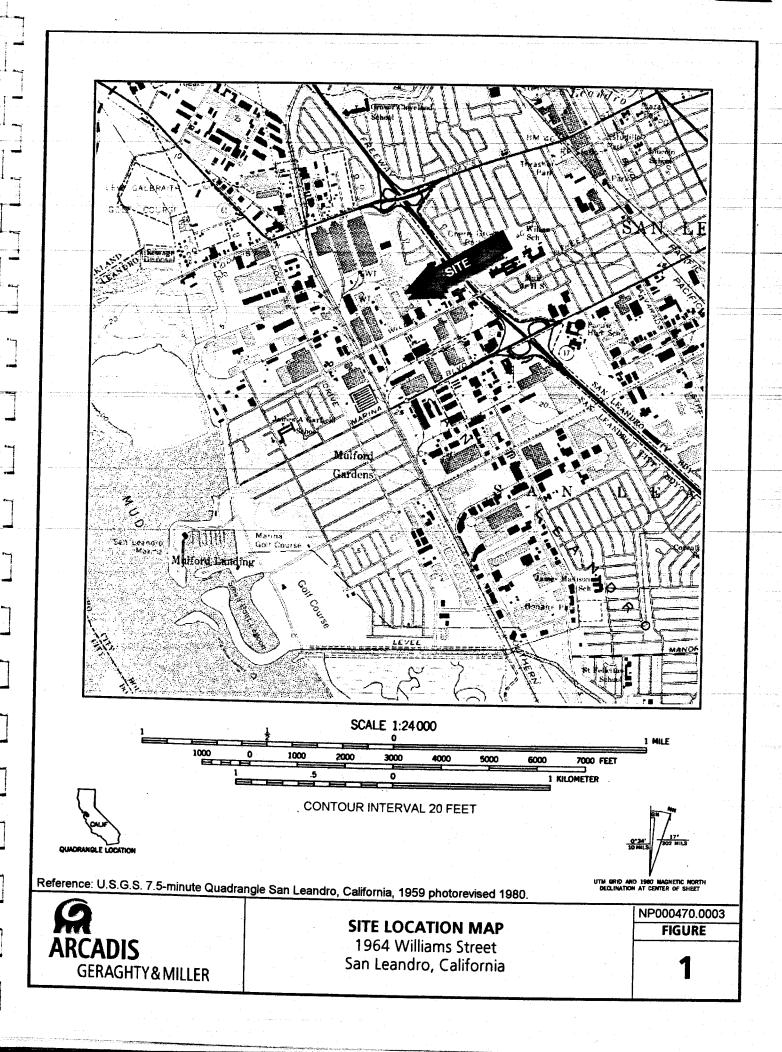
- 12. **Rescission of Existing Order**: This Order supercedes and rescinds Order No. 95-178.
- 13. **Periodic SCR Review**: The Board will review this Order periodically and may revise it when necessary. The dischargers may request revisions and upon review the Executive Officer may recommend that the Board revise these requirements.

I, Lawrence P. Kolb, Acting Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 21, 2000.

Lawrence P. Kolb
Acting Executive Officer

FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO: IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE SECTIONS 13268 OR 13350, OR REFERRAL TO THE ATTORNEY GENERAL FOR INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY

Attachments: Site Map
Self-Monitoring Program



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR:

W.S. ASSOCIATES

NESTLE USA - BEVERAGE DIVISION

AND

D. H. OVERMYER CO., INC.

for the property located at

1964 WILLIAMS STREET SAN LEANDRO ALAMEDA COUNTY

- 1. **Authority and Purpose**: The Board requests the technical reports required in this Self-Monitoring Program pursuant to Water Code Sections 13267 and 13304. This Self-Monitoring Program is intended to document compliance with Board Order No. 00-052 (site cleanup requirements).
- 2. **Monitoring**: The dischargers shall measure groundwater elevations quarterly in all monitoring wells, and shall collect and analyze representative samples of groundwater according to the following schedule:

Well #	Sampling Frequency	Analyses	Well #	Sampling Frequency	Analyses
MW-1A	SA	8021B or equivalent	MW-9B	Q	8021B or equivalent
MW-2A	A	8021B or equivalent	MW-10B	Α	8021B or equivalent
MW-3A	SA	8021B or equivalent	MW-12B	SA	8021B or equivalent
MW-4A	Q	8021B or equivalent	MW-13B	SA	8021B or equivalent

MW-6A	SA	8021B or equivalent	MW-15B	SA	8021B or equivalent
MW-7A	A	8021B or equivalent	MW-17B	SA	8021B or equivalent
MW-8A	SA	8021B or equivalent	MW-18B	A	8021B or equivalent
MW-9A	Q	8021B or equivalent	MW-20B	A	8021B or equivalent
MW-11A	A	8021B or equivalent	MW-21B	Α	8021B or equivalent
MW-12A	SA	8021B or equivalent	MW-22B	A	8021B or equivalent
MW-13A	SA	8021B or equivalent	MW-23B	Q	8021B or equivalent
MW-14A	Q	8021B or equivalent	MW-24B	. А	8021B or equivalent
MW-15A	A	8021B or equivalent	MW-25B	Q	8021B or equivalent
MW-16A	SA	8021B or equivalent	MW-26B	SA	8021B or equivalent
MW-17A	SA	8021B or equivalent	MW-10C	Q	8021B or equivalent
MW-18A	Q	8021B or equivalent	MW-17C	Q	8021B or equivalent
MW-19A	Q	8021B or equivalent			
Scott MW-2	SA	8021B or equivalent			

Key:

Q = Quarterly SA = Semi-Annually

A = Annually

8021B or equivalent = EPA Method 8021B or equivalent (includes vinyl chloride)

The discharger shall sample any new monitoring or extraction wells quarterly and analyze groundwater samples for the same constituents as shown in the above table. The discharger may propose changes in the above table; any proposed changes are subject to Executive Officer approval.

- 3. Quarterly Monitoring Reports: The dischargers shall submit quarterly monitoring reports to the Board no later than 30 days following the end of the quarter (e.g. report for first quarter of the year due April 30). The reports shall include:
 - a. Transmittal Letter: The transmittal letter shall discuss any violations during the reporting period and actions taken or planned to correct the problem. The letter shall be signed by the dischargers' principal executive officer or his/her duly authorized representative, and shall include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.
 - b. Groundwater Elevations: Groundwater elevation data shall be presented in tabular form, and a groundwater elevation map should be prepared for each monitored water-bearing zone. Historical groundwater elevations shall be included in the fourth quarterly report each year.
 - c. Groundwater Analyses: Groundwater sampling data shall be presented in tabular form, and an isoconcentration map should be prepared for one or more key contaminants for each monitored water-bearing zone, as appropriate. The report shall indicate the analytical method used, detection limits obtained for each reported constituent, and a summary of QA/QC data. Historical groundwater sampling results shall be included in the fourth quarterly report each year. The report shall describe any significant increases in contaminant concentrations since the last report, and any measures proposed to address the increases. Supporting data, such as lab data sheets, need not be included (however, see record keeping below).
 - d. Groundwater Extraction: If applicable, the report shall include groundwater extraction results in tabular form, for each extraction well and for the site as a whole, expressed in gallons per minute and total groundwater volume for the quarter. The report shall also include contaminant removal results, from groundwater extraction wells and from other remediation systems (e.g. soil vapor extraction), expressed in units of chemical mass per day and mass for the quarter. Historical mass removal results shall be included in the fourth quarterly report each year.

- e. Status Report: The quarterly report shall describe relevant work completed during the reporting period (e.g. site investigation, interim remedial measures) and work planned for the following quarter.
- 4. **Violation Reports**: If the dischargers violate requirements in the Site Cleanup Requirements, then the dischargers shall notify the Board office by telephone as soon as practicable once the dischargers have knowledge of the violation. Board staff may, depending on violation severity, require the dischargers to submit a separate technical report on the violation within five working days of telephone notification.
- 5. Other Reports: The dischargers shall notify the Board in writing prior to any site activities, such as construction or underground tank removal, which have the potential to cause further migration of contaminants or which would provide new opportunities for site investigation.
- 6. **Record Keeping**: The dischargers or their agent shall retain data generated for the above reports, including lab results and QA/QC data, for a minimum of six years after origination and shall make them available to the Board upon request.
- 7. **SMP Revisions**: Revisions to the Self-Monitoring Program may be ordered by the Executive Officer, either on his/her own initiative or at the request of the dischargers. Prior to making SMP revisions, the Executive Officer will consider the burden, including costs, of associated self-monitoring reports relative to the benefits to be obtained from these reports.

I, Lawrence P. Kolb, Acting Executive Officer, hereby certify that this Self-Monitoring Program was adopted by the Board on June 21, 2000.

Lawrence P. Kolb

Acting Executive Officer